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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/578,119

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Robert Chassagnon

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SUITE 1210

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EXAMINER

EASHOO, MARK

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/578,119	Applicant(s) CHASSAGNON ET AL.	
	Examiner MARK EASHOO	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandstrom et al. (US 2003/0089438) in view of Vasseur et al. (WO 02/088238) when taken with Applicant's admission (instant spec. published as US 2007/0082991 A1). *For convenience, the citations below are from an English language equivalent (US 2004/0127617) to Vasseur et al.*

Sandstrom et al. recites a tire having a tire tread (§12) made of a rubber composition (§12) comprised of about 70 to about 100 phr (§13) of butyl rubber (§14), specifically a brominated butyl rubber (§15); reinforcing inorganic filler (§35); a coupling agent (§35); and at least one diene-based elastomer (§17).

Regarding claims 1-5, 14, and 17, Sandstrom et al. does not teach adding a plasticizing agent of an unsaturated (C₁₂ – C₂₂) fatty acid triester of glycerol to the rubber composition of the tire tread. However, Vasseur et al. teaches adding a plasticizing agent of glycerol fatty acid triesters comprised of oleic acid (§67) to a rubber composition for tire treads (§2). Sandstrom et al. and Vasseur et al. are combinable because they are from the same field of endeavor, namely, rubber compositions for tires. At the time of the invention, a person of ordinary skill in the art would have found it obvious to have added a plasticizing agent of glycerol fatty acid triesters comprised of oleic acid, as taught by Vasseur et al., to the rubber composition for tire treads as disclosed by Sandstrom et al., and would have been motivated to do so because Vasseur et al. suggests the grip performance of the tire tread is conserved over time when this type of plasticizing agent is used in the rubber composition of the tire tread (§40).

Sandstrom et al. does not teach an inorganic filler in an amount greater than 50 phr. Sandstrom et al. does teach that the total amount of is about 50 phr (Table 3) and suggests that carbon black and silica are substantially equivalent reinforcing fillers (§35). Vasseur et al. teaches an inorganic filler in an amount greater than 50 phr (Tables 1 and 3 - for a passenger vehicle type tire) and also examples with carbon black loadings greater than 50 phr (Table 2). At the time of the invention, a person of ordinary skill in the art would have found it obvious to adjusted the amount of inorganic filler to an amount greater than 50 phr, as taught by Vasseur et al., in the rubber composition for tire treads disclosed by Sandstrom et al., and would have been motivated to do so depending upon the performance characteristics desired of the tire tread as evidenced by Applicant's own admission that a person skilled in the art will be able to adapt the amount of reinforcing

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inorganic filler according to the type of tire in question including tires for utility vehicles and heavy vehicles (§§51).

Regarding claims 6-10, Sandstrom et al. does not teach that the fatty acid of the glycerol triester (the plasticizing agent) is more than 50% by weight, preferably 80% by weight, oleic acid, or that the glycerol fatty acid triester is glycerol trioleate or sunflower oil. However, Vasseur et al. teaches that the fatty acids of the glycerol triester are comprised of oleic acid in a mass fraction equal to or greater than 70% (§67); more preferably, greater than or equal to 85% (§68). Additionally, Vasseur et al. teaches that the plasticizing agent can be glycerol trioleate (§69) or sunflower oil (§71). At the time of the invention, a person of ordinary skill in the art would have found it obvious to have the glycerol fatty acid triester be more than 50% by weight, preferably 80% by weight, oleic acid and for the glycerol fatty acid triester to be either glycerol trioleate or sunflower oil, as taught by Vasseur et al. in the rubber composition for tire treads disclosed by Sandstrom et al., and would have been motivated to do so because Vasseur et al. suggests the grip performance of the tire tread is conserved over time when this type of plasticizing agent is used in the rubber composition of the tire tread (§40).

Regarding claims 11-13, Sandstrom et al. does not teach that the amount of glycerol triester (the plasticizing agent) is between 5 and 80 phr, specifically between 10 and 50 phr, and more specifically, between 15 and 30 phr. However, Vasseur et al. teaches that the plasticizing agent is used in an amount from 10 to 40 phr. At the time of the invention, a person of ordinary skill in the art would have found it obvious to have used the plasticizing agent in the amount disclosed by Vasseur et al. in the rubber composition as disclosed by Sandstrom et al., and would have been motivated to do so because Vasseur et al. suggests the grip performance of the tire tread is conserved over time when this type of plasticizing agent is used in the rubber composition of the tire tread (§40).

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vasseur (WO 03/066722) in view of Sandstrom et al. (US 2003/0089438) and Vasseur et al. (WO 02/088238). *For convenience, the citations below are from English equivalents (US 2005/0043448 and US 2004/0127617) to Vasseur and Vasseur et al., respectively.*

Regarding claim 15, Vasseur recites a process for preparing a tire tread (§23) comprising the steps of incorporating in a diene elastomer, in a mixer (§24), a reinforcing inorganic filler (§25) and a coupling agent (§26); thermomechanically kneading the entire mixture, in one or more stages, until a maximum temperature of between 130° C and 200° C is reached (§28); cooling the entire mixture to a temperature of less than 100° C (§29); adding a vulcanization system (cross-linking system) (§30, 31); kneading the entire mixture until a

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maximum temperature less than 120° C is reached (§32); and extruding or calendaring the rubber composition thus obtained, in the form of a tire tread (§33).

Vasseur does not teach that the diene elastomer comprises more than 30 phr of butyl rubber. However, Sandstrom et al. teaches using about 70 to about 100 phr of a butyl rubber in a composition for a tire tread (§12, 13). Vasseur and Sandstrom et al. are combinable because they are from the same field of endeavor, namely, rubber compositions for tire treads. At the time of the invention, a person of ordinary skill in the art would have found it obvious to have used the disclosed amount of butyl rubber, as taught by Sandstrom et al., in the process for making a tire tread disclosed by Vasseur, and would have been motivated to do so because Sandstrom et al. teaches that butyl rubbers are known to be used in tire treads (§9).

Additionally, Vasseur does not teach adding a plasticizing agent comprising an unsaturated (C12-C22) fatty acid triester of glycerol to the mixture. However, Vasseur et al. teaches adding a glycerol fatty acid triester, namely oleic acid, to tire tread compositions as a plasticizing agent. Vasseur and Vasseur et al. are combinable because they are from the same field of endeavor, namely, rubber compositions for tire treads. At the time of the invention, a person of ordinary skill in the art would have found it obvious to have used a glycerol fatty acid triester, namely oleic acid, as a plasticizing agent in tire tread compositions, as taught by Vasseur et al. in the process for making tire treads as disclosed by Vasseur, and would have been motivated to do so because Vasseur et al. suggests the grip performance of the tire tread is conserved over time when this type of plasticizing agent is used in the rubber composition of the tire tread (§40).

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vasseur (WO 03/066722) in view of Sandstrom et al. (US 2003/0089438) and Vasseur et al. (WO 02/088238) as applied to claim 15 above, and further when taken with Applicant's admission (instant spec. published as US 2007/0082991 A1). *For convenience, the citations below are from English equivalents (US 2005/0043448 and US 2004/0127617) to Vasseur and Vasseur et al., respectively.*

Sandstrom et al. teaches the basic claimed process as set forth above.

Sandstrom et al. does not teach an inorganic filler in an amount greater than 50 phr. Sandstrom et al. does teach that the total amount of is about 50 phr (Table 3) and suggests that carbon black and silica are substantially equivalent reinforcing fillers (§35). Vasseur et al. teaches an inorganic filler in an amount greater than 50 phr (Tables 1 and 3 - for a passenger vehicle type tire) and also examples with carbon black loadings greater than 50 phr (Table 2). At the time of the invention, a person of ordinary skill in the art would have found it obvious to adjusted the amount of inorganic filler to an amount greater than 50 phr, as taught by Vasseur et al., in the rubber composition for tire treads disclosed by Sandstrom et al., and would have been motivated to do so depending upon the performance characteristics desired of the tire tread as evidenced by

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Applicant's own admission that a person skilled in the art will be able to adapt the amount of reinforcing inorganic filler according to the type of tire in question including tires for utility vehicles and heavy vehicles ((¶51).

Response to Arguments

Applicant's arguments filed 16-NOV-2007 have been fully considered but they are not persuasive. Applicant's arguments have been substantially responded to in the above rejection and are supplemented by the following remarks:

A.) With respect to applicant's allegation that the results are "unexpected", the Office disagrees. Although applicant has stated that an improvement in properties was obtained, there is no comparative evidence on the record suggests that the result were "unexpected" as opposed to results that may have been a predictable improvement. (It is submitted that the comparative data referred to in applicant's remarks do not present a large enough trend shown by the data to differentiate an unexpected result from a predictable result.)

B.) In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivations for the various limitations are set forth in the rejection above.

Although applicant did not directly response to any of the particular motivation set forth in the rejection, applicant did broadly suggest that the type of tires for each of the references have different uses (ie. passenger vehicle tires and agricultural vehicle tires). Nonetheless, applicant argument ignores that many agricultural vehicles commonly drive, for short distances, on roadways and as such would reasonably be concerned with grip on both off-road and road surfaces. Furthermore, it is noted that the instant claims are not limited to a particular type of tire and as such applicant's field of invention appears to apply to tires of all sorts and as such it is submitted that the applied references would be reasonable pertinent to applicant's technical difficulty.

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Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela C. Scott whose telephone number is (571) 274-3303. The examiner can normally be reached on Monday through Friday, 7:30am to 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571) 272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Eashoo/
Supervisory Patent Examiner, Art Unit 1796

30-Jan-08
me